

## Installation & Configuration

```

pip3 install -U stups ← installs zkubectl,
stups configure foo.example.org ← might need "sudo"

put in ~/.bashrc
source <(zkubectl completion bash)

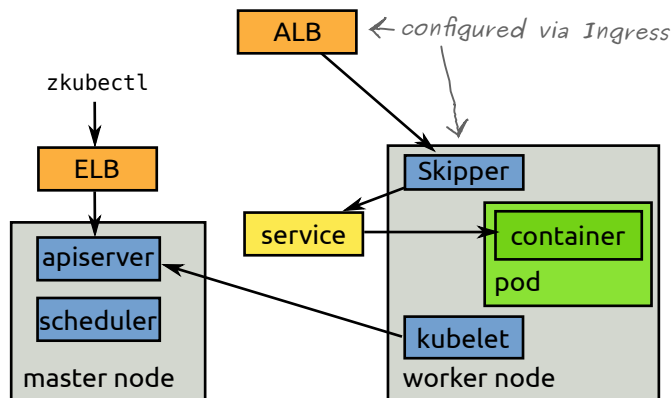
put in ~/.zshrc
source <(zkubectl completion zsh)
    
```

## Cluster Login

```

zkubectl list
zkubectl list-clusters } shows all available clusters
zkubectl login CLUSTER_ALIAS ← writes ~/.kube/config
zkubectl cluster-info
    
```

## Architecture



## Running in Production

Always run at least two replicas to survive cluster updates. *← better three*

Always set CPU/memory requests.

Always set memory limit.

Use Downwards API and MEM\_TOTAL\_KB to set JVM max heap.

Use readinessProbe. *← to only get traffic when healthy*

## Creating/Updating Resources

```

zkubectl apply -f myresource.yaml
zkubectl scale deploy DEPLOY_NAME --replicas=10
zkubectl edit deploy DEPLOY_NAME
    opens editor to change YAML
    
```

*only in test clusters*

## Troubleshooting

```

zkubectl get deploy
zkubectl get pods -l application=APP_NAME
zkubectl describe pod POD_NAME ← see status and reason (e.g. OOM killed)
zkubectl get pod POD_NAME -o yaml
zkubectl top pod POD_NAME --containers
zkubectl logs -f [-c CONTAINER_NAME] POD_NAME ← tail my app logs (or check scalar.com)
zkubectl exec -it POD_NAME CONTAINER_NAME sh
zkubectl port-forward POD_NAME [LOCAL_PORT:]PORT ← open Kubernetes Dashboard in browser
zkubectl dashboard ← does my svc have endpoints?
zkubectl describe svc SVC_NAME ← ALB configured?
zkubectl describe ingress INGRESS_NAME
https://kube-ops-view.foo.example.org ← makes my fan spin
    
```

*only works in test clusters..*

## Resource Types

configmaps	cm
deployments	deploy
endpoints	ep
events	ev
horizontalpodautoscalers	hpa
ingresses	ing
jobs	
limitranges	limits
namespaces	ns
nodes	no
statefulsets	← for databases etc
pods	po
replicasets	rs
cronjob	
secrets	← to store DB passwords and other credentials
serviceaccount	sa
services	svc
thirdpartyresources	
platformcredentialssets	← Zalando specific: declare needed OAuth tokens/clients

## Documentation & Help

<https://kubernetes-on-aws.readthedocs.io/>

kubernetes-users@example.com *← ask here - after checking the docs!*

#Kubernetes Users HipChat room

*or here*